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Before the
Federal Communications Commission
Washington, D.C. 20554

Supporting Broadband Access for Users of)
Users of Video and IP-Based Communications) RM-_____
Who Are Deaf, Hard of Hearing, Late-Deafened,)
or Deaf-Blind, or Who Have a Speech Disability)

PETITION FOR RULEMAKING

I. INTRODUCTION

The Coalition of Organizations for Accessible Technology (COAT) brings this petition to request that the Federal Communications Commission (FCC or the Commission) take steps to make broadband more affordable to people who are deaf, hard of hearing, late deafened, or deaf-blind, or who have a speech disability (hereinafter for purposes of brevity, the "target population"), by allowing these individuals to use existing Low Income programs (Lifeline and Link Up) for broadband Internet service and customer premises equipment (CPE).

COAT was launched in March 2007 and now consists of over 220 national and local organizations that advocate for full access by people with disabilities to evolving high speed broadband, wireless and other Internet protocol (IP) technologies.¹ It is the goal of COAT to ensure the inclusion of people with disabilities as our nation migrates from legacy public switched-based telecommunications to more versatile and innovative IP-based and other communication technologies. This is necessary to ensure that these

¹ A list of current COAT affiliates is attached. More information about COAT is available at <http://www.COATaccess.org>.

WCBS 08-109

individuals have equal opportunities to utilize these technologies to attain greater independence, integration, and privacy.

The achievement of universal service for all Americans, including Americans with disabilities, has always been a central goal of the Communications Act of 1934, as amended ("Act"). Despite this core objective, many people in the target population continue to lack meaningful access to the nation's communications system. For these individuals, access to Internet-based broadband services, such as video communications, is essential to being able to communicate with each other and with individuals without disabilities. Yet, the expense of broadband, coupled with the lower incomes earned by many people in the target population, makes it particularly difficult for these individuals to obtain affordable access to communications services to the same extent that voice telephone users have access to such services.

In this petition, COAT asks the Commission to remedy this disparity by allowing individuals in the target population who have low incomes, to choose whether to apply their Lifeline and Link Up subsidies for landline service *or* broadband service. As shown, the Act confers broad authority on the Commission to adopt this proposal.

II. LACK OF AFFORDABLE BROADBAND IS A BARRIER TO ACCESS TO VIDEO OR IP-BASED COMMUNICATIONS FOR PEOPLE IN THE TARGET POPULATION

Over the past decade, communications services in the United States have been shifting to the Internet. Many subscribers without disabilities, for example, have replaced their "plain old telephone service" with interconnected voice over IP (VoIP) service. Others have begun using voice, text and video to communicate directly over the Internet, even when such calls are not interconnected with the PSTN (e.g., Skype, video chat).

Similarly, the Internet has revolutionized the way many individuals in the target population communicate with each other and with individuals without disabilities. Individuals who use American Sign Language (ASL), for example, cannot communicate effectively using traditional telephone service, but are able to communicate quickly and naturally using video communications. For many ASL users – such as senior citizens and children who are unable to type – video communication is the *only* accessible means of communicating with another person at a distance. Likewise, many people who have a speech disability can communicate more effectively using video communications because their gestures and facial expressions are visible to the call recipient. Many of these individuals have speech disabilities which would prevent them from being understood without video communications. For these individuals, access to video communications via a broadband Internet connection is essential to being able to communicate effectively.

Relay services, such as video relay service (VRS), IP relay, and IP captioned telephone service (IP CTS), also rely on a broadband Internet connection. These feature-rich, innovative services may be customized for individual users in the target population and provide functionally equivalent communication access for people who were previously denied the ability to make telephone calls. Yet the high cost of broadband service is preventing many individuals in the target population – particularly those who are unemployed or underemployed – from having access to these technological developments.

A. Internet-Based Communications Make Telephone Service Possible for this Target Population

An estimated 37 million people in the United States (17%) have difficulty hearing,² including 1 million who are unable to hear a conversation at all.³ Of these 1 million people, a substantial portion use ASL to communicate. For those whose primary language is ASL, video communication is equivalent to voice telephone services.⁴ Video technology enables ASL users to communicate with friends, family members, businesses, service providers, and co-workers naturally and fluently in their primary language, either directly with other ASL users or through a relay service with people who do not sign. The advent of video communications, including VRS, has dramatically improved the lives of those ASL users who are aware of and have access to these services. Among other benefits, such access provides enhanced employment opportunities, better access to critical services such as health care, more effective access

² Pleis JR, Lethbridge-Çejku M. Summary health statistics for U.S. adults: National Health Interview Survey, 2006. Tables 11 and 12. National Center for Health Statistics. Vital Health Stat 10(235). 2007.

³ Erika Steinmetz, *Current Population Reports in Americans With Disabilities: 2002, Household Economic Studies*, U.S. Census Bureau, Table A (issued May 2006), available at: <<http://www.census.gov/prod/2006pubs/p70-107.pdf>> (“Household Census”) (estimating number of persons 15 years and older who (1) had difficulty hearing a conversation or (2) were unable to hear).

⁴ Cf. *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, 20 FCC Rcd 13165, ¶ 3 (2005) (“VRS calls reflect a degree of ‘functional equivalency’ unimaginable in a solely text-based TRS world.”). Although TTY technology served (and, for some, still does serve) an important role in providing communications access, VRS is superior to TTY because it enables ASL users to communicate in their own language, and allows conversations to take place in real time, avoiding the burden and delay of typing a message and waiting for a typed response.

to governmental agencies and services, and improved connections with family, friends, and relevant communities.⁵

In addition, one-third of Americans between the ages of 65 and 74, and almost half of those over 86, report having difficulty hearing.⁶ These adults generally do not use ASL and typically are able to speak clearly, even though they have difficulty hearing over the phone. As a result, they benefit greatly from access to captioned telephone service (CTS) and IP CTS.⁷ With IP CTS, people can read the written captions of their conversations on a computer with a broadband Internet connection, while simultaneously

⁵ See, e.g., Letter from Mary Moore (Board President of Central Florida Deaf Services) (May 18, 2006) (filed May 19, 2006, in letters from "Various") (stating that she has seen an increase in the number of clients who have trouble using TTY but who use VRS "with ease as they can communicate in their native language . . . with their doctors, businesses, their employers, friends, and families."); "Video Relay Service: FCC Consumer Facts," available at: <<http://www.fcc.gov/cgb/consumerfacts/videorelay.html>> (listing the following benefits of VRS: allowing ASL users to communicate in their primary language instead of having to type what they want to say; allowing users "to more fully express themselves through facial expressions and body language, which cannot be expressed in text"; allowing calls to flow back and forth "just like a telephone conversation between two hearing persons"; allowing conversations to take place much more quickly than with text-based TRS; and allowing calls to be "made between ASL users and hearing persons speaking either English or Spanish").

⁶ A study by the EAR Foundation and Clarity found that nearly half of the 76 million Baby Boomers in the U.S. are experiencing some degree of hearing loss. National Institute on Aging, "Hearing Loss," available at: <http://www.nia.nih.gov/HealthInformation/Publications/hearing.htm>; see also National Institute on Deafness and Other Communication Disorders, "Hearing Loss and Older Adults," available at <http://www.nidcd.nih.gov/health/hearing/older.asp>.

⁷ *Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, Internet-based Captioned Telephone Service*, Declaratory Ruling, 22 FCC Rcd 379, ¶¶ 7-9, 14-15 (2007) (*IP CTS Declaratory Ruling*). Although IP CTS does not require speeds as high as that required by video communications, it does require a broadband connection to work seamlessly. See Northern Virginia Resource Center, Education and Outreach, available at: <http://www.nvrc.org/content.aspx?page=16765§ion=7> (last visited July 18, 2008).

listening, to the best of their ability, to the responses of the other party to the call.⁸

Unlike regular captioned telephone service, which uses the public switched telephone network (PSTN), IP CTS does not require any specialized equipment in the home or in the workplace.⁹ This type of relay service can also display captions in larger text and variable fonts, thus accommodating a wider group of users.¹⁰ Given these advantages, it is not surprising that use of IP CTS has grown steadily since it was first approved for compensation from the Interstate TRS Fund in January 2007.¹¹

Many people with a hearing disability who do not use ASL rely on IP CTS to remain productive and independent in our society. Indeed, because PSTN-based CTS is not a mandated relay service and some states either do not offer this service or limit the number of people who use it, for many individuals, the IP version of CTS provides the *only* means of having access to the telephone network.¹² This holds true as well for federal retirees, because recently, the federal government ceased allowing such individuals to use the PSTN-based CTS that is provided by the Federal Relay Service.

⁸ *IP CTS Declaratory Ruling* ¶ 14.

⁹ Consumer Fact sheet, available at: <http://www.hearinglossweb.com/Issues/Access/telecomm/relay/ipcts/fcc2.htm>.

¹⁰ Consumer Fact sheet, available at: <http://www.hearinglossweb.com/Issues/Access/telecomm/relay/ipcts/fcc2.htm>.

¹¹ For example, IP CTS minutes of use have increased from approximately 400,000 in May 2007 to roughly 560,000 in May 2008. *Compare* TRS Fund Performance Status Report (June 30, 2007), *available at*: <http://www.neca.org/media/0607MaydataTRSstatus.pdf>, *with* TRS Fund Performance Status Report (June 30, 2008), *available at*: <http://www.neca.org/media/0608MaydataTRSstatus.pdf>.

¹² *See* Northern Virginia Resource Center, Education and Outreach, *available at*: <http://www.nvrc.org/content.aspx?page=13610§ion=7> (last visited July 18, 2008). To this day, Louisiana, Massachusetts, Delaware and the District of Columbia do not offer captioned telephone relay service. Many other states place limitations on the number of individuals who can sign up to receive these services each month.

For all of these individuals, many of whom are on fixed incomes, IP CTS – which requires a broadband connection – is critical.

Internet-based communications also make telephone service possible for many Americans who are deaf-blind. Deaf-blind individuals have varying degrees of impairment of both the auditory and visual senses.¹³ Although it is difficult to estimate the number of deaf-blind individuals in the United States because of the wide variation in the extent of these individuals' hearing and vision disabilities, such estimates conservatively start at 42,000 and, according to some sources, climb into the hundreds of thousands.¹⁴ People who are deaf-blind communicate in a variety of ways, and a significant number are able to use existing IP-based relay services.¹⁵ For these individuals, access to Internet-based broadband services, including video communications, is a critical component of being able to communicate with the rest of the world.

Internet-based communications also make telephone service possible for an estimated 2.6 million people who have difficulty speaking, including approximately

¹³ Orientation to Deaf-Blind, Todd R. Olsen, *available at*: <http://www.geocities.com/dblnj/dbreport.html>.

¹⁴ A study commissioned by the Department of Education in 1980 estimated that between 42,000 and 700,000 individuals have some level of both vision and hearing loss. See Turkington, Carol, and Allen E. Sussman, eds. (2000). *The Encyclopedia of Deafness and Hearing Disorders*, second edition. New York: Facts on File, Inc., p.62, cited at [http://library.gallaudet.edu/Library/Deaf_Research_Help/Frequently_Asked_Questions\(FAQs\)/Statistics_on_Deafness/Deaf-Blind_in_the_US.html](http://library.gallaudet.edu/Library/Deaf_Research_Help/Frequently_Asked_Questions(FAQs)/Statistics_on_Deafness/Deaf-Blind_in_the_US.html). See also, Barbara Miles, "Overview on Deaf-Blindness," 2000, available at <http://www.tr.wou.edu/dblink/-overview.htm>, which estimates that there are 45,000-50,000 deaf-blind individuals in the United States.

¹⁵ Comments of the American Association of the Deaf-Blind to *Petition for Clarification of Hawk Relay Concerning the Provision of Deaf-Blind Relay Service (DBRS)*, CG Docket No. 03-123 (February 4, 2008).

610,000 individuals reporting severe difficulty speaking.¹⁶ Although many of these individuals do not use ASL, they would nonetheless benefit enormously from access to video communications, which would facilitate conversation by enabling peer-to-peer video call recipients to see gestures, facial expressions, and other visual communication cues to better understand what the person with a speech disability is saying.¹⁷ Users of speech-to-speech (STS) relay service also would benefit from the addition of video to that service, which would enable the communications assistant (CA) to detect and use visual cues to better assist the user in making calls. Like other segments of the target population who need broadband access to communicate, people with speech disabilities will benefit significantly from being able to access Internet-based communication services in their employment, education, recreation and other aspects of their lives.

B. Broadband is Necessary for Functionally Equivalent Internet-Based Forms of Communications

Broadband enables people in the target population to obtain access to high-quality video of sufficient clarity and speed for communication in ASL, signed English, or other methods of visual communication. Full-motion video requires a standard “frame rate” of 30 frames per second to ensure smooth motion playback and sharp resolution.¹⁸ In order

¹⁶ *Household Census*, Table 2 (estimating number of persons 15 years and older who had (1) difficulty with speech or (2) severe difficulty with speech).

¹⁷ *See, e.g.*, Comments of Winston Ching, Community Representative, Telecommunications Access for the Deaf and Disabled Administrative Committee, Advisory Committee to California Public Utilities Commission, CG Docket No. 03-123 (July 28, 2008) (speech-to-speech relay service conducted over a video connection “has the potential of significantly increasing the comprehension rate for STS CAs by use of a myriad of visual communication cues including lip reading, spelling in the air, facial expressions, and other physical movements that may facilitate understanding of what persons with speech disabilities are saying”).

¹⁸ BRINGING HOME THE BITS, Chapter 3, *available at*: <<http://books.nap.edu/html/broadband/ch3.html>>.

to obtain this transmission rate, users require access to a symmetric, two-way broadband connection of at least 256 Kbps (both upstream and downstream).¹⁹ Use of a narrowband or asymmetric broadband connection will result in transmission of fewer frames per second and deliver a lower resolution, “jerky” playback,²⁰ making it difficult, if not impossible, for a viewer to follow the video communication, especially if it involves ASL or other signing (especially finger spelling), gestures, lip reading, or other visual cues. As it has done in other contexts, it is critical that the Commission ensure that any rule it adopts is technologically neutral. In particular, the Commission should be careful not to limit support to a particular transmission media or technology. However, the Commission should ensure that transmission speeds are sufficient to support Internet-based forms of communications used by people in the target population.²¹ Accordingly, the Commission should define supported broadband services broadly and in a manner that enables its rules to keep pace with future technological developments.

¹⁹ Most video relay service providers, for example, require a minimum of 256 Kbps both upstream and downstream. *See, e.g.,* Sorenson VRS, Frequently Asked Questions, VRS System Requirements Questions, *available at*: <<http://www.sorensonvrs.com/what/faq.php#sys1>>; Hamilton Relay, Technical FAQs, *available at*: <<http://www.hamiltonrelay.com/support/faq/videorelay/technical.htm#1>> (optimum performance requires a broadband internet connection of 384 kbps or faster); and Hands On VRS, Connection FAQ, *available at*: <<https://www.hovrs.com/cc/faq.aspx#67>> (minimum of 128 Kbps upload and download speed required, but 256 Kbps is recommended).

²⁰ BRINGING HOME THE BITS, *supra* note 18.

²¹ For example, to the extent that the trend of tiered rates for broadband services continues, the FCC would have to ensure that the lowest (*i.e.*, least expensive and, presumably, slowest) broadband tier supplied the minimum bandwidth necessary to accommodate Internet-based forms of communications, including peer-to-peer video communications and relayed services. As noted *supra*, VRS services today require a minimum of 256k upstream and downstream. Peer-to-peer video communications also typically require a minimum of 256k up and downstream; however, some equipment may require higher speeds. To the extent these requirements increase in the future, as providers continue to innovate and more bandwidth-intensive features become available, the FCC similarly will have to take steps to ensure continued access.

C. People in the Target Population Continue to Earn Less and Experience Lower Employment Rates, Compared to the Overall Population

Compared to the population overall, Americans in the target population disproportionately earn less and have higher levels of unemployment. As a result, the monthly cost of a broadband connection is often something they simply cannot afford.

In 2002, about 30% of working age individuals with severe difficulty hearing a conversation was unemployed,²² and close to 60% of working age individuals with severe speech difficulties was unemployed.²³ In comparison, about 12% of the U.S. working age population with no reported disability was unemployed.²⁴ Individuals in the target population also earn less than their counterparts without disabilities. For example, in 2002, workers with no reported disability earned a mean annual salary of \$32,870. In comparison, American workers with severe hearing difficulties earned \$24,089 (roughly 25% less), and those with severe speech difficulties earned \$20,750 (almost 37% less).²⁵

The U.S. Census Bureau classifies people who are deaf or have severe difficulty hearing or speaking as persons with “severe disabilities,” and concludes that they are more likely than those without “severe disabilities” to receive Social Security, live in poverty, or have a household income below \$20,000.²⁶ Almost 30% of those identified

²² *Household Census*, Table 5. Specifically, respondents 21 to 64 years old were asked whether they had been employed at some point during the twelve months prior to the Census interview. *Id.* at 9.

²³ *Id.*, Table 5 (reporting data for individuals 21-64 years old).

²⁴ *Id.* (reporting data for individuals 21-64 years old).

²⁵ *Id.*

²⁶ Among other conditions, the U.S. Census Bureau in the 2002 HES Census Data report classifies persons who are deaf or have severe difficulty hearing or speaking as having a severe disability. “More Than 50 Million Americans Report Some Level of

as having “severe disabilities” receive Social Security, compared to 2.5% of those who report no disability.²⁷ Over one-quarter (25.9%) of workers who are classified by the Census as having a “severe disability” report living in poverty, compared to roughly 8% of those without a disability.²⁸ These individuals are also three times more likely (37.8%) to earn a household income of less than \$20,000 than individuals with no disability (12.3%).²⁹

D. Broadband Is More Expensive Than Basic Phone Service

The high cost of broadband results in consumers in the target population paying more for broadband communication access – which acts as their telephone substitute – than other consumers pay for basic telephone service.³⁰ For example, in October 2005, the average local telephone rate for residential customers in urban areas was under \$25.³¹ By contrast, in May 2006, the Pew Internet and American Life Project reported that the average monthly price for cable modem service was \$41.³² A review of current pricing plans for cable modem and DSL providers confirms that, with only one exception, broadband prices – even for broadband purchased as part of a bundle – remain in the

Disability,” U.S. Census Press Release, May 12, 2006, *available at*: <http://www.census.gov/Press-Release/www/releases/archives/aging_population/006809.html>.

²⁷ *Household Census*, Table 4.

²⁸ *Household Census*, Table 4.

²⁹ *Household Census*, Table 4.

³⁰ This rate was further reduced for low income subscribers, who are eligible for federal and often state universal service support, as discussed below. *Trends in Telephone Service*, Industry Analysis and Technology Division, Wireline Competition Bureau, at 7-3, & Tables 3.1, 13.1 (Feb. 2007).

³¹ *Id.*

³² *Home Broadband Adoption 2006*, Pew Internet & American Life Project, p. 15 (May 2006).

\$39-\$59 range for 256 Kbps, the minimum upload speed typically required for video communications:

Provider ³³	Maximum Upload Speed	Monthly Price
Comcast	384 Kbps	\$42.95
Time Warner	384 Kbps	\$44.95
Cox	384 Kbps	\$29.95
	512 Kbps	\$44.95
	1 Mbps	\$57.99
Charter	512 Kbps	\$54.99
	1 Mbps	\$59.99
Cablevision	2 Mbps	\$49.95
AT&T ³⁴	128 Kbps	\$39.95
	384 Kbps	\$49.95
Verizon	128 Kbps	\$24.99
	768 Kbps	\$34.99
Bell South	128 Kbps	\$19.95
	256 Kbps	\$32.95
	384 Kbps	\$37.95
	512 Kbps	\$42.95
Qwest	896 Kbps	\$49.99

³³ Source: Published offerings of companies as of 7/31/2008. Upload speeds of 256 Kbps used where available. For companies that do not offer a speed of 256 Kbps, information is provided for speeds offered.

³⁴ When it merged with BellSouth, AT&T began to offer a high-speed Internet service ("FastAccess DSL Lite") for \$10 per month which features downstream speeds of up to 768 kbps. *AT&T Inc. and BellSouth Corporation Application for Transfer of Control*, Memorandum Opinion and Order, 22 FCC Rcd 5662, App. F (2007). This offer, however, is time-limited and requires the consumer to subscribe to (and pay for) AT&T local telephone service. In addition, because this offer provides upstream speeds of no greater than 128 kbps, it is not fast enough to support ASL. See "FastAccess DSL Term Agreement Plans Available," available at: <http://www.bellsouth.com/consumer/inetsrvcs/inetsrvcs_agreement_plans_pop.html>.

Moreover, many quoted rates, particularly promotional rates, are available only if the customer purchases a “bundle” and subscribes to cable television or telephone service in addition to broadband.³⁵ While regular, non-promotional rates for broadband purchased as part of a bundle are typically lower than the regular stand-alone rate for broadband, in order to take advantage of these lower rates, people in the target population often must subscribe to additional services that they may not need or be able to afford.³⁶

E. The Expense of Broadband Combined with Lower Incomes Makes Broadband Unaffordable

The expense of broadband clearly deters its adoption, especially among lower income households. According to a Pew Internet Project survey, 30% of households with annual incomes under \$30,000 have broadband at home, while 76% of households with incomes over \$75,000 have broadband.³⁷ A May 2006 report from the General Accounting Office (GAO) further confirms that factors such as household income and

³⁵ An example is the Comcast “Triple-play” bundle, in which a customer can subscribe to high-speed Internet, digital voice, and digital cable for \$99 a month for the first 12 months. Under this plan, the high-speed Internet costs \$33 a month instead of the regular price of \$42.95. Similarly, Time Warner Cable offers customers the option of bundling high speed Internet with either basic cable or digital phone service. Under this bundle, the monthly price of broadband drops from \$46.95 to \$34.95 during the promotional period. Cablevision charges \$49.95 per month for high speed Internet, but customers who bundle the service with cable and voice will pay only \$29.95 per month for the first 12 months.

³⁶ For example, Time Warner Cable’s promotional rate of \$34.95 increases after the initial period, but the price of broadband *in the bundle* will never exceed \$39.95 per month, which is still less than the regular stand-alone monthly price of \$46.95. Cablevision’s regular stand-alone price for high speed Internet is \$49.95 per month, but the price of this same service drops to \$44.95 per month if the customer also subscribes to cable or voice service. Qwest offers a \$5 per month bundle discount.

³⁷ *Home Broadband Adoption 2007*, Pew Internet & American Life Project, p. 4 (June 2007).

broadband costs influence household adoption of broadband.³⁸ In that report, the GAO found that households with incomes in the top quartile nationwide are almost 40% more likely to purchase broadband service than households with incomes in the bottom quartile.³⁹

Low Internet use by people in the target population is largely a function of low-income levels and lack of affordability. Researchers have found that members of these communities are less likely to live in households with computers, less likely to use computers, and less likely to be online. Once the researchers control for socioeconomic backgrounds, however, these seeming distinctions disappear.⁴⁰ Indeed, studies show that, as household income rises, Internet users are more likely to switch from dial-up to broadband service.⁴¹ Likewise, in a study by the Yankee research group, 45.5% of non-broadband users cited “too expensive” as the reason they had not subscribed to broadband.⁴²

³⁸ *Broadband Deployment is Extensive throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas*, GAO Report to Congressional Committees, pp. 28-31 (May 2006).

³⁹ *Id.*, p. 29.

⁴⁰ “The Disability Divide in Internet Access and Use,” by Dobransky, K. & Hargittai, E. in *Information, Communication & Society*, 9, 3, 313-334 (2006).

⁴¹ *A Nation Online: Entering the Broadband Age*, U.S. Dept. of Commerce, Economics and Statistics Administration, National Telecommunications and Information Administration, Appendix, Table 4 (Sept. 2004). Dial-up users who say they do not plan to switch to broadband are more likely to have lower incomes than the average Internet user. *Home Broadband Adoption 2006*, Pew Internet & American Life Project, p. 9 (May 2006) (45% of dial-up users who do not plan to switch to broadband reported household incomes of under \$50,000).

⁴² *Broadband Reality Check II: The Truth Behind America's Digital Decline*, Consumers Union, 27 (August 2006). This conclusion is further supported by anecdotal evidence. Personnel at the Northern Virginia Resource Center for the Deaf and Hard of Hearing, for example, have received inquiries from employers regarding the availability of broadband subsidies to support the hiring of deaf and hard of hearing workers.

Although some Americans in the target population currently pay for broadband service, they often must sacrifice other essentials in order to do so. Karen and Terry Batts, who live near Peoria, Illinois, are an example of this phenomenon. Karen is hard of hearing and Terry is deaf. The couple reportedly paid \$45 per month to obtain high-speed Internet service to support video communication and access to VRS. In order to do so, they heated only one room of their house, lowered the coverage on their auto insurance, and started eating cheaper canned foods rather than fresh fruits and vegetables despite the detriment to Terry's diabetic condition.⁴³ Clearly, it is unacceptable for these and other individuals in the target population to have to make such sacrifices simply to afford what are, for them, basic communications services, a core goal of the Act's universal service mandate.

F. Lack of Affordable Broadband Prevents Access to Communications Services for Many Individuals in the Target Population

Lack of affordable broadband translates into a failure to fulfill the universal service goals for many Americans in the target population. Today, the vast majority of Americans have access to traditional telephone service. About 95% of the general population and 93.2% of households with incomes below \$20,000 subscribe to basic telephone service.⁴⁴ The rate for households with incomes over \$100,000 is 99%.⁴⁵ In

Conversation with Cheryl Heppner, Executive Director of Northern Virginia Resource Center for the Deaf and Hard of Hearing, in Washington, D.C. (June 25, 2008).

⁴³ Jeremy Pelzer, "Special Phones for Deaf Need Broadband," *State-Journal Register* (June 4, 2007), *available at* <http://www.sj-r.com/sections/news/printfile/115984.asp>.

⁴⁴ "Telephone Subscribership Report," Table 4 (Feb. 2008).

⁴⁵ *Id.*; *see also* "Universal Service Monitoring Report," CC Dkt. No. 98-202, prepared by the Federal and State Staff for the Federal-State Joint Board on Universal

stark contrast, the lower incomes of the target population result in only a small percentage of these individuals being able to afford the broadband that they need to communicate effectively over distances. For example, it is estimated that less than 20% of deaf and hard of hearing individuals who communicate in ASL have access to video communications, their functional substitute for basic phone service.

In other contexts where, as here, particular communities are gravely underserved, the Commission has adopted measures aimed at enabling consumers to obtain access to communications services that would otherwise be prohibitively expensive. For example, when faced with the low overall telephone penetration rate in Native American tribal communities, the Commission launched a series of initiatives to increase subscribership within that population.⁴⁶ Yet the penetration rate that existed in that case (46.6%) is *more than twice* the estimated video communications penetration rate among ASL users (less than 20%). Clearly then, Commission action is sorely needed to close the disparities for these communities.

G. Lack of Accessible Broadband and Telecommunications Equipment Poses Even Greater Barriers for Individuals who are Deaf-Blind

There is one population in the United States for whom virtually all communications services – analog, digital and now broadband – have always posed

Service in CC Dkt. No. 96-45, at 6-4 and Table 6.1 (2005), *available at*: <http://www.caltelassn.com/Reports06/Universal%20Service/UnivSer05.pdf>.

⁴⁶ See *Federal-State Joint Board on Universal Service: Promoting Deployment and Subscribership in Unserved and Underserved Areas, Including Tribal and Insular Areas*, Further Notice of Proposed Rulemaking, 14 FCC Rcd 21177, ¶¶ 5, 6, 9 (1999). See also *Federal-State Joint Board on Universal Service*, Twelfth Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking, 15 FCC Rcd 12208, ¶¶ 2, 5 (2000) (“*Tribal Lands Order*”) (On average, Indians had a penetration of only about 47 percent, versus 77 percent for rural households earning less than \$5,000 and 94 percent for all households in the United States.).

considerable barriers. This is the deaf-blind community, a community that has never been able to benefit from the Communication Act's promises of universal telephone service because of the barriers posed by the specialized CPE needed by these individuals to make calls. Specifically, individuals who are deaf-blind often use communication devices with refreshable Braille key pads that are extremely expensive, typically costing thousands of dollars per unit. While some states have distribution programs that provide free or discounted specialized CPE to their residents with disabilities,⁴⁷ the exorbitant costs for these specialized devices – running anywhere from \$5,000 - \$10,000 – have prevented the majority of these programs from supporting this equipment. The result is that, of all individuals with disabilities, deaf-blind individuals have remained the least able to access our nation's communication systems.

To remedy this, we propose that any universal service fund program adopted by the Commission that permits the use of Low Income funds for broadband Internet service specifically allocate a modest \$10 million to fund the distribution of CPE needed by people who are deaf-blind. As the United States moves to upgrade its national communications infrastructure, this measure is urgently needed to meet the unique communications needs of this population. Because of the small dollar amount requested, this targeted amount would not be overly burdensome for the universal service fund. At the same time, it would inform the world that as the United States moves to upgrade its national communications infrastructure, it will be bringing along the persons most likely

⁴⁷ More about these programs can be found by visiting the website of the Telecommunications Equipment Distribution Program Association, the trade association for these equipment distribution programs, <http://www.tedpa.org/tedpainfo/stateprograms.html>.

to remain unserved and underserved – the deaf-blind population – so that they too can benefit from the many advantages of broadband technology.

III. THE COMMISSION SHOULD TAKE THE PROPOSED MODEST STEP TO MAKE BROADBAND AFFORDABLE TO LOW-INCOME INDIVIDUALS IN THE TARGET POPULATION

The Commission should take a modest step towards making broadband affordable by allowing eligible low-income individuals in the target population the choice of applying their Lifeline and Link Up subsidies to broadband Internet service in lieu of basic voice telephone service. Specifically, these individuals should be permitted to use (1) Lifeline support to help defray the monthly costs of broadband service, and (2) Link Up support to help lower the upfront costs, if any, of initiating broadband service. Such a measure is both justified and needed because, for these individuals, having a broadband connection is a substitute for having a traditional telephone line. In addition, in the case of people who are deaf-blind, the Commission should permit the use of Low Income universal service fund support to be used for specialized CPE. The Commission has authority to implement these proposals, as described in more detail below.

The statutory mandate is clear: a central goal of the Commission is the achievement of universal service for all Americans. Video and other forms of Internet-based communications that require broadband connections, including point-to-point direct communications, VRS and IP CTS, can achieve this goal for many Americans in the target population. The promise of these and future Internet-based applications will be realized, however, only when the potential users of these services can afford to subscribe to broadband Internet services.

In order to comply with the statutory mandate and achieve the goal of universal service for all Americans, the Commission should take expeditious action to initiate a

rulemaking proceeding and seek comment on the proposal submitted herein. Moreover, as with the *Tribal Order*, the Commission should seek comment on what other steps it should take to achieve the goal of ensuring universal service through affordable broadband for all Americans in the target population.

A. Broadband Support Should be Provided through the Low Income Programs

The Lifeline and Link Up programs, which make up the current Low Income programs in the federal universal service fund, were established to help ensure that people with low incomes have access to affordable telephone service. Lifeline lowers the monthly cost of service to subscribers, while Link Up lowers the cost of installation. The Lifeline program provides a basic level of federal support, as well as additional federal support to match state Lifeline programs.⁴⁸ This federal support is currently capped at \$10 per line per month, except on Tribal lands,⁴⁹ and the state support can provide an additional \$3.50 per line per month, for a total of \$13.50. The actual amount provided to subscribers varies by state.⁵⁰ Link Up benefits include a reduction of half of the carrier's customary charge, or \$30, whichever is less. In addition, the Link Up program provides the consumer with an interest-free deferred schedule for payment of the charges assessed

⁴⁸ See 47 C.F.R. § 54.400 *et seq.*

⁴⁹ The low-income support for subscribers living on Tribal lands has been expanded because these areas have reported critically low telephone subscribership levels and significantly lower-than-average incomes. See *Federal-State Joint Board on Universal Service; Promoting Deployment and Subscribership in Unserved and Underserved Areas, Including Tribal and Insular Areas*, Twelfth Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking, 15 FCC Rcd 12208, ¶¶ 24-28 (2000). The maximum federal Lifeline support for subscribers on Tribal lands is \$25. 47 C.F.R. § 54.403(a)(4).

⁵⁰ See the explanation of Low Income program benefits on the Universal Service Administrative Company's website at <<http://www.usac.org/li/low-income/benefits/lifeline.aspx>>.

by the carrier for commencing service (for connection charges up to \$200, excluding security deposits).⁵¹

States with Lifeline programs generally establish their own criteria for subscribers seeking to show low-income status.⁵² In the absence of state eligibility criteria, the Commission's criteria apply.⁵³ Under the federal criteria, a consumer's income must be at or below 135% of the Federal Poverty Guidelines or a consumer must participate in one of several federal assistance programs.⁵⁴ Providers of services for which the current Low Income support is available must be "eligible telecommunications carriers."⁵⁵

1. Redirecting Federal Universal Service Low Income Benefits

As noted above, for many people in the target population, the only effective substitute for basic voice telephone service is video communication. For others, the only effective substitute may be IP CTS. But as also noted, in order to have access to these services, these populations must overcome a hurdle that is disproportionately not present for other Americans: they must be able to afford broadband service. The Commission should modify the federal universal service Low Income program so that when these classes of individuals qualify for low-income financial assistance for basic voice telephone services through the Lifeline and Link Up programs, they are permitted to

⁵¹ 47 C.F.R. § 54.411. Eligible residents of Tribal lands can receive a reduction of up to \$70 in addition to the \$30 reduction, to cover 100% of the charges between \$60 and \$130 assessed for commencing telecommunications service. 47 C.F.R. § 54.411(a)(3).

⁵² 47 C.F.R. § 54.409(a).

⁵³ 47 C.F.R. § 54.409(b).

⁵⁴ The federal assistance programs are Medicaid, Food Stamps, Supplemental Security Income, Federal Public Housing Assistance (Section 8), Low-Income Home Energy Assistance Program, National School Lunch Program's free lunch program, and Temporary Assistance for Needy Families. *Id.*

⁵⁵ 47 C.F.R. § 54.201.

apply that financial assistance to a broadband Internet connection rather than to traditional voice telephone service. In addition, when deaf-blind individuals qualify for such low-income assistance, they should be permitted to use that assistance to acquire accessible CPE.

There is a demonstrable need for the Commission to modify the federal Low Income universal service programs as proposed. The Commission has demonstrated that it can and will tailor programs when necessary to enable underserved communities to obtain access to communications services that would otherwise be prohibitively expensive for those communities.⁵⁶ Given that people in the target population in the United States are similarly underserved, the Commission should take the extra steps proposed in this Petition to ensure that the goals of universal service are accomplished for these communities as well. Doing so will promote the Act's principal goal of universal service for all Americans.⁵⁷

Permitting eligible people in the target population to use the existing Low Income support to defray the costs of broadband service and equipment, in the case of the deaf-blind population, also enjoys support from members of Congress and state policymakers. On June 19th, 2008, for example, Rep. Edward Markey (D-MA) introduced a bill to amend the Act to ensure that emerging Internet-based communications services will be

⁵⁶ See *Federal-State Joint Board on Universal Service: Promoting Deployment and Subscribership in Unserved and Underserved Areas, Including Tribal and Insular Areas*, Further Notice of Proposed Rulemaking, 14 FCC Rcd 21177, ¶¶ 5, 6, and 9 (1999); see also discussions *supra* at 17 and *infra* at 26.

⁵⁷ See *Lifeline and Link-Up*, Report and Order, 19 FCC Rcd 8302, ¶ 1 (2004) (“[W]e believe there is more that we can do to make telephone service affordable for more low-income households. Only one-third of households currently eligible for Lifeline/Link-Up assistance actually subscribe to this program. We agree with the Federal-State Joint Board on Universal Service (Joint Board) that the current Lifeline/Link-Up program could be modified to serve the goals of universal service better.”).

accessible to Americans with disabilities. Among other things, the proposed legislation directs the Commission to “designate as services supported by Lifeline and Link Up assistance programs and other Federal universal service support mechanisms those telecommunications services and IP-enabled communication services that are needed by individuals with disabilities to engage in communication with one or more other individuals in a manner that is functionally equivalent to the ability of individuals without disabilities to engage in such communication.”⁵⁸ It also directs the Commission to “establish rules that define as eligible for universal service support those programs that are certified by a State commission or approved by the Commission for the distribution of specialized customer premises equipment designed to make telecommunications service, and advanced communications, including interexchange services and advanced telecommunications and information services, accessible by individuals who are deaf-blind.”⁵⁹ Additionally, earlier in the year, the National Association of Regulatory Utility Commissioners passed a “Resolution to Support Equal Access to Communication Technologies by People with Disabilities in the 21st Century,” which endorsed use of the universal service fund’s Low Income programs to support broadband services and equipment for individuals with disabilities who rely on broadband services for communication.⁶⁰

⁵⁸ Twenty-First Century Communications and Video Accessibility Act of 2008, H.R. 6320, 110th Cong. § 105(a)(2) (2008). As of October 2008, this bill has the co-sponsorship of 15 additional legislators.

⁵⁹ *Id.* at § 105(b)(2).

⁶⁰ NARUC Board of Directors, “Resolution to Support Equal Access to Communication Technologies by People with Disabilities in the 21st Century” (adopted Feb. 20, 2008), *available at* <<http://www.naruc.org/Resolutions/People%20with%20Disabilities%20Resolution1.pdf>>.

2. Support and Eligibility

Support Levels. The modified Lifeline and Link Up programs for people in the target population should offer the same absolute level of low-income financial support for broadband services that is otherwise provided for basic voice telephone services.

Provider Eligibility. The group of communications entities eligible to receive funding should be expanded to include providers that offer broadband services as information services. With the exception of DSL services offered by some rural incumbent LECs, most DSL services and cable modem services are offered as information services, not as telecommunications services. Accordingly, if support for broadband access were restricted to broadband offered as a telecommunications service, it would not be a meaningfully available option. The Commission should adopt rules regarding provider eligibility for Low Income support for broadband services to permit people in the target population to apply their Low Income support to broadband services with sufficient transmission speeds to support Internet-based forms of communications from the widest possible range of entities.

Consumer Eligibility. COAT proposes that consumers meet two independent eligibility screens to qualify for Low Income broadband support. First, the consumer should have to meet the current income eligibility requirement. This could be determined and verified in accordance with existing federal low-income procedures, which are well established.⁶¹ Second, the consumer will have to be deaf, hard of hearing, late deafened, or deaf-blind, or have a speech disability. The Commission should allow consumers to

⁶¹ If a state similarly were to permit state low-income support for broadband services for people who are deaf, hard of hearing, late deafened, or deaf-blind, or who have a speech disability, the state eligibility requirements could apply instead of the federal requirements, as is the case currently for low-income programs.

self-certify. Self-certification has been permitted for purposes of receiving support or benefits through other state and federal programs. For example, for many years, some state programs permitted people who were deaf and hard of hearing to self-certify that they were TTY users in order to receive toll discounts on their local telephone bills. Similarly, where contingent funds are used in the Digital-to-Analog Converter Box Coupon Program, consumers requesting coupons must self-certify that they do not subscribe to cable, satellite, or other pay television services.⁶² Students completing a secondary education in a home-schooled setting similarly may self-certify their educational eligibility for federal financial aid,⁶³ and some states permit schools and libraries to self-certify their eligibility for discounted service under universal service programs.⁶⁴ The alternatives to self-certification would be administratively complex, whereas the risk of harm from fraudulent claims that a person is a member of the target population would be very low, particularly given that a consumer's low-income status would still be verified.

B. The Commission Has Authority To Develop The Proposed Broadband Support Mechanism

Beginning with the very first section of the Act, which was adopted in 1934, and extending through more recent amendments, such as those adopted in 1996, Congress has consistently made clear that one of the Commission's foremost duties is to ensure that no

⁶² See "Commerce Department Issues Final Rule to Launch Digital-to-Analog Converter Box Coupon Program," released March 12, 2007, available online at: <http://www.ntia.doc.gov/ntiahome/press/2007/DTVfinalrule_031207.htm>.

⁶³ 34 C.F.R. § 668.32 (e)(4); *see also* 64 Fed. Reg. 57355-57359.

⁶⁴ See, e.g., "Maximizing Your E-rate: Making the Most of Telecommunications Discounts for Schools and Libraries," State Library of North Carolina, available online at <<http://statelibrary.dcr.stat.nc.us/hottopic/uniserv/eratseum.htm>>.

segment of the population lags behind others in access to affordable communication services. These statutory provisions confer broad authority on the Commission to permit eligible broadband providers to receive Lifeline and Link Up support for the provision of broadband Internet access to qualified low-income people in the target population.

In section 1 of the Act, Congress stated that a primary purpose of the Commission is “to make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.”⁶⁵ A half century later, as part of the Americans with Disabilities Act of 1990, Congress added section 225 to the Act, which incorporates by reference the Commission’s universal service duties under section 1 and, in furtherance of those duties, requires the agency to ensure that people in the target population have access to “functionally equivalent” relay services.⁶⁶ When Congress adopted the Telecommunications Act of 1996, it further strengthened the Commission’s universal service mandate by making clear that all Americans deserve access not only to basic telephone service, but also to the full gamut of advanced telecommunications and information services and technologies. In the preamble to the 1996 Act, Congress stated that a principal goal of that legislation was to “encourage the rapid deployment of new

⁶⁵ 47 U.S.C. § 151.

⁶⁶ 47 U.S.C. § 225(a)(3) (defining TRS as relay services that provide the ability for an individual with a hearing or speech disability to communicate by wire or radio in a manner that is “functionally equivalent” to the manner in which individuals without a disability communicate by wire or radio using voice services); 47 U.S.C. § 225(b)(1) (“In order to carry out the purposes established under section 1, to make available to all individuals in the United States a rapid, efficient nationwide communication service, and to increase the utility of the telephone system of the Nation, the Commission shall ensure that interstate and intrastate telecommunications relay services are available, to the extent possible and in the most efficient manner, to hearing-impaired and speech-impaired individuals in the United States.”).